
Chinese Takeaways: Vegetarian Culture in Contemporary China¹

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Abstract:

Vegetarianism has a long tradition in Chinese culture. Both Chinese Buddhism and Daoism promote a vegetarian diet based on the teaching of not taking life. Both also have had a long and fine vegetarian cuisine culture as a healthy lifestyle and a culinary art form. Bean curd was invented by the Chinese some 2,000 years ago. However, if you visit China today, it is not easy to find a vegetarian restaurant or come across a vegetarian. Interestingly, in the past few years, vegetarian restaurants started to appear in major Chinese cities in increasing numbers. This paper first provides an overview of the Chinese vegetarian tradition for the cultural context, and then focuses on vegetarianism in contemporary China. It presents the results from a recent survey on Chinese vegetarian culture before discussing the implications of the study, in particular in relation to ethical eating and animal welfare as a new consideration in Chinese vegetarianism, Chinese health issues associated with meat eating, and a general characterization of the vegetarian culture in contemporary China.

Key Words: Vegetarianism, Chinese vegetarians, Animal welfare, Meat consumption, Chinese food culture

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1. INTRODUCTION

There is a popular idiomatic expression in Chinese used when men are threatening and facing off one another in a fight or confrontation - *Wo bushi chi su de!* One man would declare loudly to the others. It literally says “I am surely not a vegetarian”! It really means: “I am not a weak person, but a red-blooded, macho tough guy, so don’t mess with me”. In Chinese, the phrase carries various cultural connotations. *Chi su*, “eat vegetarian food” or “on a vegetarian diet”, has the sense that a vegetarian is physically feeble and weak as a result of not eating meat. Furthermore, there is a popular association of vegetarianism with Buddhism in China. The expression implies that non-meat eating Buddhist monks would be more accommodating and tolerant of others and would not get into physical fights.

Vegetarianism has a long tradition in Chinese culture. *Doufu/tofu*, or bean curd, was invented by the Chinese about 2,000 years ago.² Traditionally, both Chinese Buddhism and Daoism/Taoism have advocated the notion of not taking life (human and non-human) and abstention from meat. Both have had a long and fine vegetarian cuisine culture in China that has been passed on as a pure form of earthly existence for after life reincarnation, a culinary art, and a distinctive Chinese cuisine. More recently in the past few years, the Chinese vegetarian food culture and vegetarian restaurants have witnessed a major resurgence with the revival of the traditional vegetarian cuisine and the influence in ethical eating from the West.

For our purpose, in the blossoming field of vegetarianism studies, the predominant focus and published works are Western, and the literature on vegetarianism is largely drawn from Western cultures as acknowledged (see Ruby, 2012). In recent times, a limited number of studies have been published focusing on Chinese vegetarianism, for instance, studies on the vegetarian population in Beijing from an anthropological perspective (Y. Wang, 2016), on Chinese Buddhist vegetarian restaurants and vegetarians (Klein, 2017), on Chinese cruel gastro-aesthetics and vegetarian ethics from a literary perspective (C.-J. Chang, 2016), a study of ethical eating in China (C. Liu, Cai, & Zhu, 2015), and a number of health focused studies relating to vegetarianism (Mao & et.al., 2015, 2016). This paper is an attempt to contribute to the growing scholarly studies on vegetarianism in general and Chinese vegetarianism studies. In particular, it considers vegetarianism in connection with the nascent animal welfare awareness in China today. It first provides the background and cultural context for traditional vegetarian culture in China, and then focuses on contemporary Chinese vegetarianism. It finally discusses the implications of the study.

2. BRIEF HISTORICAL BACKGROUND AND CULTURAL CONTEXT OF VEGETARIANISM IN CHINA

² *Doufu/tofu*, literally ‘beans fermented’, bean curd, is said to have been invented in northern China around 164BCE by Liu An, a Han dynasty (202BCE-220CE) prince.

Food has always been very important for the Chinese. It is no exaggeration that the Chinese are among the peoples of the world most preoccupied with food and eating which are central to the Chinese way of life and part of the Chinese ethos (K. C. Chang, 1977), with food playing a central role in the life of a broad across-section of an entire people, a food-centred culture (Simoons, 1991, pp. 13-14). As once described:

It is [China's] food that stirs the imagination of her thinkers,
sharpens the wits of her scholars,
enhances the talents of those who work by the hand,
and enlivens the spirit of the people (F.T.Cheng cited in Simoons, 1991, p. 13).

It is true that Chinese attitudes towards food drew on an amalgam of influences including physical, economic, religious, and ritual interactions well as artistic and philosophical reflection (Sterckx, 2011, p. 11). From early on, food culture was deeply implicated in many aspects of ancient Chinese social, political, intellectual and religious life; it offered an important lens through which human identities were shaped, and a medium through which people interacted both with each other and with the spirit world (Sterckx, 2011, p. 11). In short, food constitutes a central fibre in Chinese culture, past and present (Sterckx, 2011, p. 11).

For our purpose, China has had a long and complex relationship with meat eating and consumption of various kinds of animals (Cao, 2015, 2018), as it has with vegetarianism. Meat eating and vegetarian diet have developed alongside each other in the history of Chinese food culture. Chinese food has the longest documented history, longer than any other food tradition of comparable variety (K. C. Chang, 1977, p. 4). It is believed that in the Chinese creation mythology, one of the earliest Chinese prophets, Fuxi, is said to have taught the early Chinese people to hunt, fish and cook, and to plant seeds and grow food. However, in ancient China, among the earliest Chinese philosophers, such as Confucius and his contemporaries, there was no substantive intellectual discussion on the morality of meat eating or the promotion of vegetarianism. The dietary culture from the Zhou (1046BCE – 256BCE) to Han dynasties (202BCE – 220CE) shows no mention of vegetarianism (Sterckx, 2011). Buddhists are believed to have systematically promoted the principles and practice of vegetarianism to China when vegetarian cooking was encouraged in Chinese Buddhist kitchens about 2,000 years ago. For this reason, the Chinese people often associate vegetarianism with Buddhism, although when Buddhism was first transmitted from India to China, there was no requirement that monastics not eat meat. Later generations advocated vegetarianism on grounds of compassion. In particular, Emperor Wu of the Liang dynasty recommended the entire monastic order take up vegetarianism and encouraged the laity to become vegetarians too (Venerable Master Hsing, 2015, p. 1). As documented, when the Buddhism came to China and well before that, there were records of animal sacrificial rituals and of fasting from meat in early China, but it was only with the introduction of Buddhism that vegetarianism became commonplace (C.K. Yang, 1961, C.S. Wong, 1967, D.H. Smith 1968, cited in Simoons, 1991, p.31).

For Buddhism-influenced vegetarianism, it has been known and practiced in China since at least the 7th century. It became relatively popular in the Tang (618-907CE) and Song dynasties (960-1279CE) (see Hu, 2015). From the Qing dynasty (1644-1911), vegetarian cooking became widespread in China and was not only practiced in temples, but also by some urban population and importantly, in the imperial court, elevating vegetarian cooking to become respected and recognized as a prominent culinary school or cuisine in Chinese cooking.

When vegetarianism was first promoted by the Buddhists in China, their teaching of not taking life and abstention from meat found a sympathetic resonance in the Chinese hearts and minds that had been profoundly influenced by Daoism.³ Indigenously, a few hundred years earlier, Daoism as a leading philosophy and religion of worshiping nature advocated the notion and practice of leading a simple life, and Daoists opposed human intervention in nature and human indulgence of various kinds including lavish food consumption. Although Laozi, the first Daoist philosopher, and other early leading Daoist philosophers did not specifically write about vegetarianism, the early Chinese medical philosophy that had been influenced by Daoism taught the notion of “five grains to nourish, five fruits to assist, five livestock to benefit, and five vegetables to fill”, that is, relying on grains (such as wheat, rice, millet) and beans as the main sources of nourishment, and eating fruits, vegetables and meat as supplement (He, 2013). This traditional diet pattern has been followed for thousands of years in China including today, that is, rice or wheat as “core food” (*zhushi*) and meat and vegetables as supplements. Later Daoist followers and literati class, based the nature oriented philosophy of Laozi and Zhuangzi (circa 370-287BCE), started to advocate the idea that eating meat makes people smelly or foul and eating vegetarian food makes people clear or pure.

The early medieval Daoism had different types of vegetarianism: divine vegetarianism for deities, ritual vegetarianism (occasional vegetarianism) for priests and community leaders, and complete vegetarianism for immortality seekers (Komjathy, 2011). As described (Komjathy, 2011), it appears that a Daoist commitment to permanent vegetarianism first emerged in the context of Daoist monasticism, with both forms of religious expression (vegetarianism and monasticism) occurring under the influence of Buddhism. The latter included recognition of suffering, karmic influences and consequences, and the importance of compassion. It is also pointed out that it is unclear when and if vegetarianism became normative among Daoist monastics, but there are glimpses of the dietary practice beginning in early medieval Daoist monasticism. It appears that only fully committed monastics, only full ordinands, were required to maintain a strict vegetarian diet (Komjathy, 2011). Generally speaking, Daoism advocates vegetarianism and encourages practitioners to follow a vegetarian diet to minimize harms to all life forms. It has complex and rules and rituals related to diet but not all Daoist followers are

³ Another Buddhist manifestation of not taking life is *fangsheng* (releasing life), the practice of liberating animals from food markets and then either keeping them in monasteries or releasing them to the wild. In recent years, some of such random releases have caused ecological havoc when animals were released to the wild habitats that were unsuitable causing ecological damage, or the animals suffered and died miserable deaths after release.

vegetarians. Daoist levels of dietary restriction are varied. Different sects of Daoism have different rules (see Huang, 2011). Some Daoist priests, for instance, Quanzhen sect, are pure and strict vegetarians while others only follow a vegetarian diet during fasting periods and other important dates, for instance, Zhengyi sect. Generally, the Daoists view life as representing a harmonious balance of material elements of *yin* and *yang*. If those elements could be maintained in absolute harmony, they believe, life would be extended indefinitely. As pointed out, it is fair to say that Daoist dietary practices were not wholly based on respect for animal welfare, but more on the view that consumption of certain foods might interfere with bodily harmony (Simoons, 1991, p.32). Nevertheless, many modern Quanzhen monastics have a commitment to animal welfare and ecological flourishing. Some of these individuals work to relieve animal suffering and to ensure space for animal flourishing (Komjathy, 2011).

Relevantly, it is also believed that the spread of Buddhist vegetarianism in China was facilitated by the influence of Confucianism which advocated benevolent kindness (Venerable Master Hsing, 2015, pp. 2-3). For Confucianism, there was no general opposition to animal slaughter or meat eating. The ethical teaching of Confucius focused on perfecting the individual and his contributing to the general well-being through respect for the great sages of the past and conformity with the ways heaven and customary practices of family and society; and among those practices were rites involving animal sacrifice (Simoons, 1991, p. 32). As rightly pointed out, compassion for animals, especially ones with whom a person has lived or worked, is common among humans in many parts of the world, but it does not normally lead to a person to reject all animal sacrifice or turn the person to vegetarianism, and this was the case with Confucius, Mencius and their followers (Simoons, 1991, p. 32).

In short, both Chinese Buddhism and Daoism have encouraged vegetarianism. Daoist vegetarianism is largely based on a precept of purity of the body and mind and compassion for nature as sacred whereas Buddhist vegetarianism is based on the teachings of karmic retribution, compassion, refraining from killing and subduing one's subservience to the senses. Their emphasis and intent for vegetarianism is human centred. Because of this, vegetarianism in China has many variations and considerable flexibility (see later). Even within Buddhist and Daoist religious practices, there are no strict requirements on vegetarianism. For instance, Chinese Tibetan Buddhists are not obligated to be vegetarian (Venerable Master Hsing, 2015). From at least the thirteenth century, the demands of a vegetarian Buddhist community have spawned vegetarian restaurants in Chinese cities and inspired the creation of a distinctive vegetarian cuisine, complete with various sorts of imitation meats as well as strict avoidance of alcohol, garlic, onions, and leeks - all linked to the avoidance of meat in Buddhism (Kieschnick, 2005, p. 197). Vegetarianism has in recent decades become a focus of attention among lay Chinese Buddhists, and the number of Buddhist vegetarian restaurants both in China and overseas has grown steadily, supported by a sizeable industry that manufactures vegetarian products (Kieschnick, 2005, p. 197). As suggested, religious resurgence is not a sufficient explanation for the growing popularity of vegetarian fare in China, but Buddhist eating places

often play an important part in shaping vegetarian practices and discourses and their relationship to more mainstream Chinese foodways (Klein, 2017, p. 254). Nevertheless, Buddhism has remained the greatest pro-vegetarian force for the past one thousand years or so in China.

3. VEGETARIANISM IN CONTEMPORARY CHINA

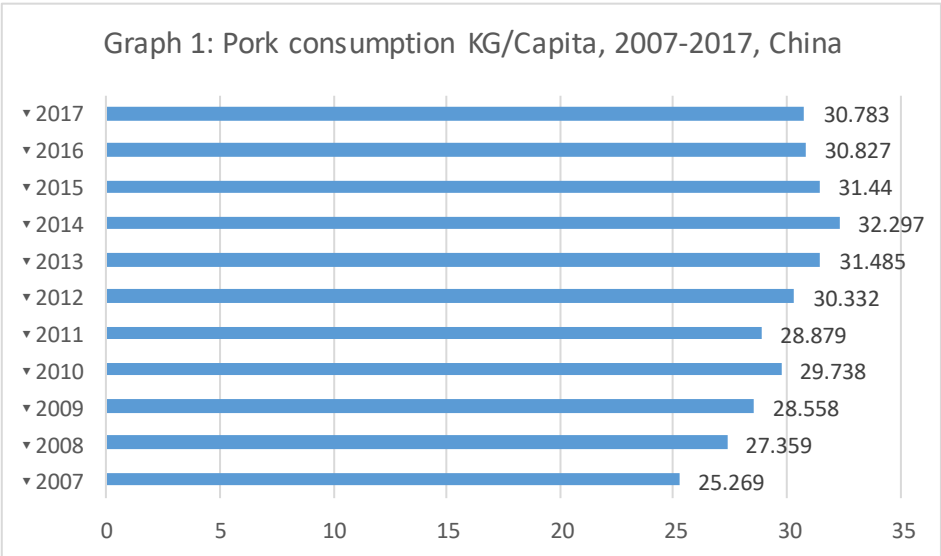
First of all, throughout most of the 20th century, the Chinese people suffered from many major calamities, both natural and man-made, such as wars, famines, and mass starvation. For contemporary China in the more recent past, starting from 1949 when the many wars finally ceased to the late 1970s when the Cultural Revolution (1966-1976) ended, there was an acute shortage of food of all kinds in China. Living in abject poverty, most Chinese could not afford food, let alone meat. Many died of starvation in the late 1950s and 1960s, and many more suffered severe malnutrition and food deprivation. Foods of all kinds, including grains, vegetables, fruits, meats and many other daily necessities, were scarce. Basic foods were rationed for over three decades. From the 1960s to the early 1980s, most Chinese barely had enough of any food, and mainly relied on minimal amount of grains, soybean products and some basic vegetables for survival. Meat was a luxury for the vast majority of the Chinese. Small amount of meat (that is, mainly pork and chicken), eggs and fish were only available as rare treats during Chinese New Year, other major festivals and special family occasions. As a result, the Chinese people did not consume much meat or animal products in those years, but not by choice. I would describe this as “involuntary vegetarianism”, or forced starvation, to be more accurately. Years of starvation and malnutrition have left many Chinese of those generations with lingering health problems and an extreme hunger and craving for food, especially meat. That also resulted in a constant psychological fear for any possible shortage of food for most Chinese for the many years after the 1980s when living standards started to improve including today. Undoubtedly and without exaggeration, the starvation of several decades has left profound physical and psychological scars on many Chinese, especially those who are over the age of 60 living in China today.

The abject poverty started to decrease in the early 1980s after the Cultural Revolution ended and after China began opening up to the world, developing its economy and allowing its people to have some freedom in food production. As China's economy improved from the 1980s onwards, especially in the 1990s and the last two decades, lifting most Chinese people especially the urban population out of extreme poverty, there is now abundance of food and oversupply of food. Meat and other foods are no longer luxury but daily fare as part of the everyday food. One marked change in Chinese food consumption is the increasing consumption of meat that has occurred during the last few decades (H. Liu, Parton, Zhou, & Cox, 2009). There has been in recent times an indulgence and over-consumption of meat and other foods in China, a kind of over-compensation for many Chinese.

In this connection, a few words about the Chinese way of eating and cooking. An important part of Chinese dieting habits is the distinction between *fan* and *cai*. *Fan* literally means cooked rice or other grain and starch foods, such as porridge, steamed bread, noodles. *Cai* means vegetables, but more broadly the dishes that accompany *fan*, such as dishes made from vegetables, meat and other ingredients. To the Chinese, a balanced meal must have an appropriate amount of both *fan* and *cai*, the so-called Chinese *fan-cai* principle (K. C. Chang, 1977, pp. 7-8), and *fan* is the more critical of the two, the basic, essential element of a meal, the so-called “core food”. *Cai* is regarded as an addition or supplement. In colloquial Chinese, we have a common greeting still used today, “Have you eaten *fan* [cooked rice or food] yet?”, similar to “How are you today?” Of the *cai* dishes, an important Chinese cooking feature is stir-fried dishes, which usually consist of a combination of cut meat and vegetables or other non-meat ingredients. For such dishes, often vegetables or bean curd products are the main ingredients, while finely cut meat slices or shreds, stripes together with spices are secondary or used to garnish and add more flavour. So, meat does not normally dominate a Chinese meal as it invariably consists of *fan* and much vegetables and other foods. This remains the case today when various kinds of food are in abundant supply and affordable for most Chinese in China today, and also for most Chinese families living in Western countries. Generally speaking, Chinese cooking is characterized by a large variety of foods, and meat is not the core or indispensable ingredient.

Understandably, with the fast lifting of the living standards in China and abundant supply of food in recent times, the average Chinese person’s consumption of animal products in the last two decades or so has been on the increase, rising from an extreme low level of meat consumption in the previous decades. For instance, for pork, the meat the Chinese consume the most, its consumption has been steadily increasing for the last three decades. In 1990, the pork meat consumption in kilograms per capita in China was 15.247 kg; in 1996, it was 19.758 kg (OECD, 2018). In the last decade, the growth trend continues from 2007 to 2014: it was 25.260kg in 2007 and 32.297kg in 2014. Thus, the average consumption of pork in China doubled if we compare 1990 with 2017. However, in the past four years, pork consumption has been decreasing slightly to 30.783kg in 2017 compared to 32.297kg in 2014 (see Graph 1) (OECD, 2018):

Graph 1: pork consumption in China from 2007-2017, kilograms/capita.⁴



Not only has the pork consumption declined for the past four years, the total consumption of the major meat categories of pork, poultry and beef also reflects such a trend if we compare the amount in 2014 and 2015-2017, although the consumption of beef/veal and poultry increased slightly over the same period (see Table 1):⁵

Table 1 Major meat consumption in China: Kilograms/capita, 2008-2017

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
beef & veal	3.204	3.32	3.398	3.344	3.431	3.583	3.694	3.848	4.001	4.067
poultry	10.556	10.841	10.987	11.127	11.74	11.876	11.435	11.76	12.143	12.273
pork	27.359	28.558	29.738	28.879	30.332	31.485	32.297	31.44	30.827	30.783
Total	41.119	42.719	44.123	43.35	45.503	46.944	47.426	47.048	46.971	47.123

At this stage, we do not know for sure the reasons for the slight decrease. According to OECD-FAO, meat consumption is related to living standards, diet, farm animal production and

⁴ All the figures quoted in this paper for meat consumption were extracted from the data of the OECD (2018) Meat consumption (indicator), and then re-organized and compiled in tables and graphs for this study.

⁵ The Chinese also eat mutton, duck, and other animals, but not in significant amounts, thus not included here.

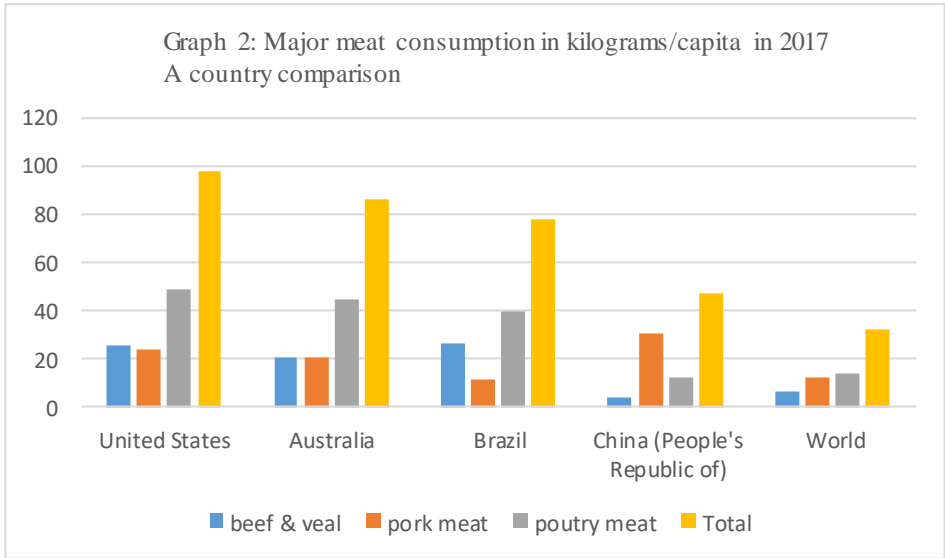
consumer prices, as well as macroeconomic uncertainty and shocks to GDP; and meat demand is associated with higher incomes and a shift - due to urbanisation - to food consumption changes that favour increased proteins from animal sources in diets (OECD, 2018). For China, in the last few decades, the increase in meat consumption is largely related to the rising living standards and changes to increasing proteins from meat. For the recent decrease, there may be a variety of reasons, such as changes in price, changes in lifestyle, health concerns, food scandals, vegetarianism, among others.

Despite the general growth trend of meat consumption in China for the last three decades, the total average per capita meat consumption of beef/veal, poultry and pork in China is still far below those in Western countries such as the USA and Australia, and some developing countries such as Brazil, although China's total such meat consumption per capita, 47.2kg, is well above the world average of 32.7kg (see Table 2).

Table 2 Major meat consumption in different countries. Kilograms/capita, 2017

	beef & veal	pork	poultry	Total
United States	25.8	23.6	48.8	98.2
Australia	20.9	20.7	44.5	86.1
Brazil	26.5	11.8	39.9	78.2
China	4.1	30.8	12.3	47.2
World	6.5	12.3	13.9	32.7

Therefore, if we consider the total amount of meat consumed by country, China is the largest consumer given China's population size of 1.4 billion. However, on a per capita basis, China ranks much lower (see Table 2 and Graph 2).



Although we do not know the exact reasons for the slight decline in pork consumption in China in the past few years, the reality is some Chinese are reducing meat consumption after many years' increase. One possible reason could be that as reported anecdotally, a growing number of the Chinese population is opting for non-meat diet or going vegetarian, either reducing meat intake or avoiding meat altogether. Indeed, a study projected the vegetarian market in China to rise by more than 17% for 2015–2020, suggesting a significant shift is taking place in Chinese food consumption patterns (Lewis, 2018).

Despite the long tradition, vegetarianism is far from being accepted as mainstream in China. Some Chinese are now giving preferences to non-meat diet, and the past five years or so have seen growth in the visibility of the vegetarian movement (McCarthy, 2017), especially in major cities for young people. A fledgling network of vegetarian organizations has become points of connection; on popular online platforms, WeChat and Sina Weibo interest groups have also grown, becoming hubs for people to share information and recipes, and to find support (McCarthy, 2017); vegetarian societies have also sprung up in universities.⁶ Encouragingly, in 2016, the Chinese Nutrition Society's updated guidelines for the first time included a set of recommendations for vegetarians (McCarthy, 2017). Given China's 1.4 billion people, reduction in meat consumption could have a proportionally significant global impact.

In this connection, it is necessary to briefly consider the size of the vegetarian population in China. So far, there are no official statistics for the number of Chinese vegetarians. It has been claimed and reported that China has 50 million vegetarians. However, such a claim appears to

⁶ Universities and Colleges Vegetarian Association in China has branches in about 107 universities in 31 cities: (Zhou, 2017).

stem from Western media's guesses based on a guesstimate rate of four to five percent of the 1.4 billion Chinese,⁷ not based on any empirical data. This highly inflated figure has been quoted by the Chinese state media and Chinese vegetarian societies as well. The Chinese Vegetarian Association confirmed to this author recently that they have not done any surveys on the vegetarian population and they just use the reported media guesstimate. It is true that it is difficult to accurately arrive at the number of Chinese vegetarian population as there are many different types of vegetarians or partial vegetarians in China (see later), and the Chinese dieting patterns and the vegetarian market change rapidly in today's environment. Another estimate puts the number at about 14 million, or about one percent of the Chinese population (Leng, 2018). In 2016, in a questionnaire survey about vegetarianism with the residents in Shanghai, 4,004 people in the city were surveyed where it was found that 0.77% of them follow a vegetarian diet (Mao & et.al., 2015). This was extrapolated to an estimated 1.8 million vegetarians for the entire Shanghai population of 24 million. If this percentage is used for the entire Chinese population (and this would not be accurate or scientific as Shanghai is the most cosmopolitan, open and educated urban area in China with more vegetarian restaurants based on this author's research of vegetarian restaurants in major Chinese cities), it would translate into an estimated 10 million vegetarians for the whole of China. However, this would still seem an exaggerated figure. As noted earlier, it is rare to come across vegetarians in China with few vegetarian eateries, becoming a vegetarian in China is still a "rare life choice" (Y. Wang, 2016).

Irrespective the lack of an accurate estimation of the Chinese vegetarian population, what is true is that in recent years, an increasing number of vegetarian restaurants have started to appear in major cities across China, with many inspired by a Buddhist ethos, others promoting a green and meat-free lifestyle (Leng, 2018). For instance, Beijing had only about two vegetarian restaurants in the late 1990s, but now it has over 100. Similarly, the number in Shanghai grew from 49 in 2012 to more than 100 in 2017.⁸ Undoubtedly, the expanding vegetarian population and the growing popularity of vegetarian food in China would have a positive impact on the farming and consumption of animals and the environment as a whole, and a significant beneficial effect on the health of the Chinese people. An understanding of this growing trend and population group will likewise be beneficial.

4. SURVEY ON CHINESE VEGETARIAN CULTURE

Data collection

In order to gauge Chinese people's views and practices on vegetarianism, the author conducted an online questionnaire survey on Chinese vegetarian culture from 14 September to 31

⁷ See <http://vegnews.com/articles/page.do?pageId=6392&catId=8>

⁸ For a comparable population for Shanghai, as a comparison, there are estimated 2.3 million vegetarians out of 23 million total population in Taiwan, and the number of vegetarian restaurants there is believed to be around 6,000, as opposed to around 100 in Shanghai.

December 2017 using a Chinese online poll platform called Diaochapai (www.diaochapai.com). It was an anonymous survey entitled “China Vegetarian Culture Survey”. A total of 501 questionnaires were returned. The survey system only allows each IP address to participate once, thus avoiding repeated participation by one person and ensuring 501 questionnaires were by different participants. The questionnaire contained 10 questions concerning the age and diet orientation of the respondents, their views on various aspects related to vegetarianism, such as reasons and perceived benefits and drawbacks of a vegetarian diet. The questions were multiple choice questions, and the respondents may also choose to elaborate if they wish. The main data are summarized below. In this survey, no distinction was made as to vegetarian, vegan (which was introduced to China from the West in the last few years), and other types of vegetarian.

A note on the mixed sampling of both vegetarian and non-vegetarian participants for the survey: as there are many different types and varieties of vegetarians in China due to historical and religious reasons, there is no one single definition of who is considered a vegetarian. At this stage of China’s growing and fast changing vegetarian population in transition, and for the purpose of this study, the focus is on gaining an understanding of the general population on vegetarianism and the Chinese eating habits or preferences relating to vegetarianism. It is also noted that this is a simple and basic survey, an initial step to gain some basic knowledge about Chinese vegetarians as there has been little research done in this area.

Results

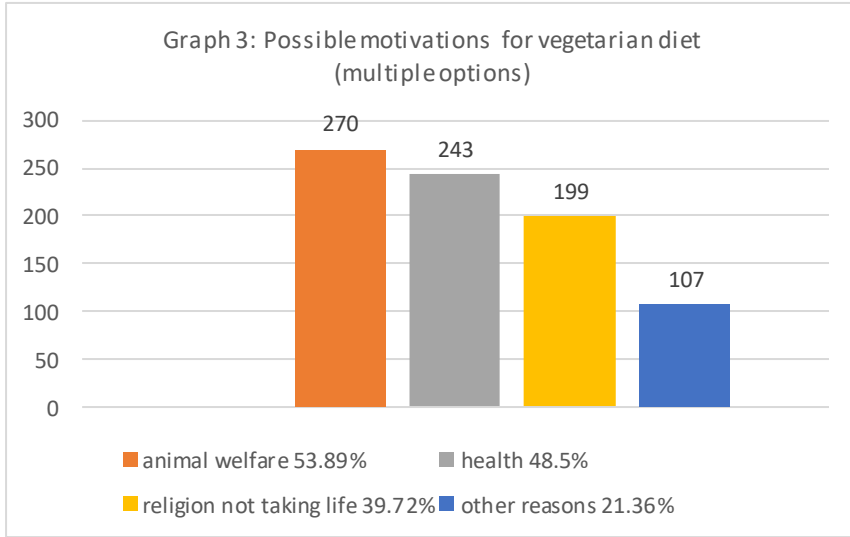
First of all, regarding the demographic composition of the respondents to the survey, the results of the questionnaire showed that in terms of age, the respondents are overwhelmingly young or middle aged, with the proportion of respondents under the age of 50 accounting for 97.4%, of which 72.85% are under 35. Only 2.59% are over 51. This largely reflects the trend of the general online population in China, that is, most web users are young people. In addition, out of the 501 respondents, 89 are men (17.76%) and 412 are women (82.24%), with female being the overwhelming majority. The respondents are located from different parts of China, but no information was collected as to their specific cities.

Furthermore, of the 501 respondents, 62 are vegetarians, 12.38% of the total number of respondents, and 439 are non-vegetarians accounting for 87.5%. In the non-vegetarian respondent category, the number of people eating less meat (once per week or less) is 157, accounting for 35.8%. In addition, 70% of the non-vegetarians indicated that they may become vegetarians in the future. Some respondents indicated that the external reason for not being able to become a vegetarian is due to the constraints of family eating habits. One respondent also commented: “As family members eat together, and even if making separate vegetable dishes for me alone, it would be difficult not to be tempted by the meat dishes.”

Motivations

The question “What do you think are the reasons for a vegetarian diet” is a general query that the respondents may choose multiple reasons. a slight majority (270 people, 53.89%) think

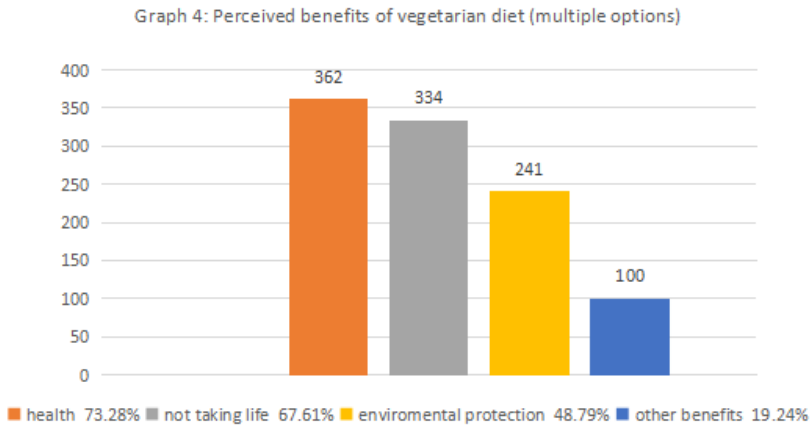
people choose vegetarianism out of concern for animal welfare, 199 people (39.72%) believe religious teaching is a reason, 243 people (48.5%) think it is for health reasons, another 107 people (21.36%) think there are also other reasons not listed (see Graph 3).



Some respondents wrote down what they think are the possible motivations for themselves or other vegetarians, such as concerns for animals being slaughtered and hurt, wishes that animals can be treated equally as humans, the teaching of Buddhism of no kill, environmental crisis, and health.

Perceived benefits of a vegetarian diet

As for the perceived benefits of a vegetarian diet, a big majority (73.28%) said human health, a majority (67.61%) said not taking life (associated with religious teaching); almost half (48.79%) said environmental protection, and some (20.24%) said there are also other benefits not listed (see Graph 4). Therefore, health is considered by the respondents as the most important benefit of a vegetarian diet.

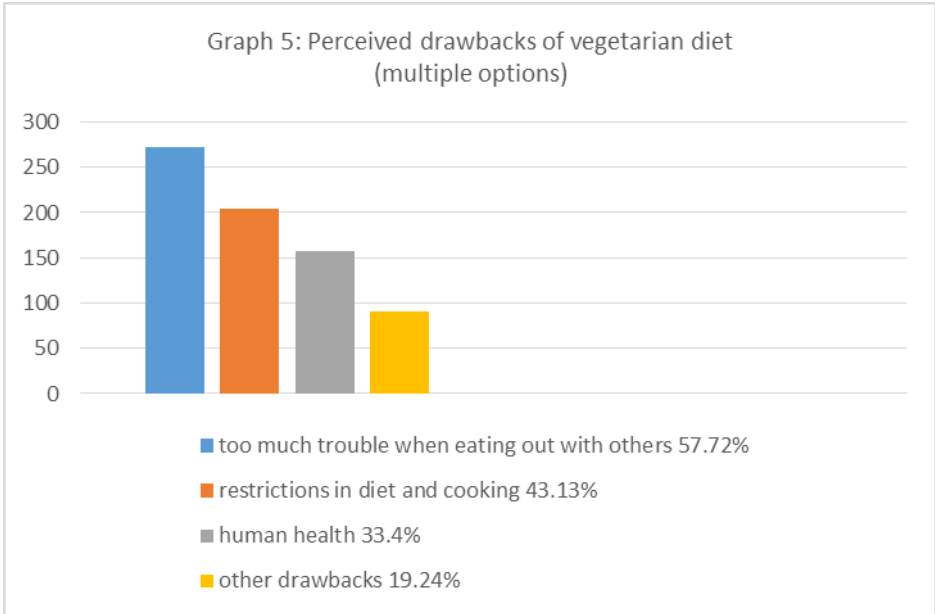


Some respondents wrote down specific health benefits of a vegetarian diet, including longevity, not elevating blood lipids, not gaining weight, and benefits for vascular health and brain health, and increasing vitamin intake, reducing calorie intake, no hormones that are found in meat, no constipation, good temperament, no sense of guilt, enhancing disease resistance, improving people’s intellectual competence, and good for the environment.

Regarding the relationship between vegetarianism and environmental protection and the benefits to the environment, some of the respondents mentioned: environmental protection, consuming less water, human and other resources, low carbon, resource conservation, the planet belongs to everyone including animals, animal conservation, farmed animals consume large amounts of natural energy and resources, seriously endangering our environment. Some respondents also pointed to other benefits including karmic retribution, reducing waste, among others.

Perceived drawbacks of a vegetarian diet

The question “What do you think are the negatives with a vegetarian diet” is a multiple choice question, and it is not compulsory. 473 people (94.41%) answered the question and 28 people (5.59%) skipped. Of this, 158 people (33.4%) think vegetarian diet is not conducive to human health; 204 people (43.13%) think vegetarian diet and cooking are too restrictive; more than half (57.72%) think it is more troublesome for vegetarians to eat out. Inconvenience in eating out was also reported in another recent study for vegetarians in China (Y. Wang, 2016). Some (19.24%) think there are other drawbacks not listed (see Graph 5):



Some respondents think a vegetarian diet may result in malnutrition. Some specified perceived drawbacks, including lacking variety in diet; unbalanced nutrition; malnutrition; lacking fat, protein and amino acids intake and other nutrients. Nutrition imbalance was mentioned by many respondents as a disadvantage.

5. DISCUSSIONS

It is acknowledged that the online survey has its inherent limitations. The survey participants are younger, have a higher proportion of vegetarians and a better awareness of animal welfare issues. This cannot be automatically inferred to represent the percentage of the vegetarian population in China. A few general implications and thoughts about Chinese vegetarian culture are provided next.

Vegetarianism and animal welfare in China

Notably, the concern for animal welfare is becoming an important reason for the choice of vegetarian food in today's Chinese society. Religion, the traditional motivation for vegetarianism is still a major reason, but the survey confirmed the findings of other recent studies or suggestions that a growing number of people in China are choosing vegetarian food for animals. For instance, in a study of vegetarians in Beijing, ethical motives were most often reported, followed by health and religious motives (Y. Wang, 2016). The findings of the present survey correspond to the Beijing study in the order of motivations, as "a new kind of vegetarianism", a new generation of vegetarians incorporating multiple new motivations

including health, environment and animal welfare which were generally imported from the West (Y. Wang, 2016, p. 105).

The backdrop to these is the fact that in recent years, more ordinary Chinese people have an increased awareness of the value and vital roles of the natural environment and other living beings, and are more interested in animals and animal welfare (Cao, 2015; You, Li, Zhang, Yan, & Zhao, 2014). A nascent grassroots animal protection movement is forging ahead, gaining traction particularly via Chinese social media (Wong, 2011). There is an emerging moral awakening and personal participation in helping and caring for animals in the last ten years or so. This movement is still in its infancy, only a very small fraction of Chinese society are taking part, but it is expanding. Initially, the animal rescuers and volunteers focused on the rescue of cats and dogs, but now are starting to show concern for other animals such as farm animals. Many of them have become vegetarians in the process. They are the backbone and principal activists in animal protection in China today. These and other young Chinese vegetarians today are part of a “new wave vegetarianism” that pay homage to Buddhist and other Chinese traditions of meat avoidance but have mainly adopted a secular, health-oriented, modern and international lifestyle choice (Klein, 2017, p. 253).

Health related issues

As the survey shows, health is a major factor for choosing and not choosing a vegetarian diet. There are two sides to the coin. On the one hand, many Chinese are under the impression that keeping a vegetarian diet without animal products is unhealthy, and vegetarian food alone will result in poor health especially malnutrition as indicated in the survey. On the other hand, some Chinese now start to recognize the harmful effects of heavy intake of meat to one’s health and the beneficial impact of vegetarian food, also as shown in the survey. Thus, potentially, health considerations may be the biggest attraction for Chinese to opt for more vegetarian food. Equally it is also the biggest obstacle for more people to become vegetarian. It would be useful to consider how to utilize both sets of beliefs for the benefit of the Chinese people and farm animals.

As mentioned before, grains are the foundation of the Chinese diet. Rice is the essential food in China. So is wheat in the forms of noodles, dumplings, pancakes, and steamed bread. Chinese cuisine makes extensive use of vegetables and plants. Numerous fruits, vegetables, plants, and animal meats and eggs, and legumes and beans, are consumed, but very few dairy products. Traditional Chinese diet is low in fat and dairy products and high in complex carbohydrates and sodium. However, in recent years, Western food, especially American fast food introduced to China, high in fat, protein, sugar and low in complex carbohydrates, have resulted in obesity, diabetes, and heart diseases for an increasing number of the Chinese. Despite the popular impression of many Chinese that a vegetarian diet is not healthy enough, there is now medical evidence as to the beneficial effects of vegetarian food and the harmful effects of meat in particular in relation to the incidence of type 2 diabetes, cardiovascular health, overweight/obesity and overall mortality concerning the Chinese in and outside China. For

instance, there is evidence from observational and interventional studies that demonstrates vegetarian diets are beneficial in preventing and treating type 2 diabetes. Specifically to the Chinese with Chinese eating habits, a 2010 Chinese study observed that vegetarians living in suburban Beijing were less likely to have diabetes (L. Zhang, Qin, Liu, & Wang, 2010). Vegetarian diets have been found to be beneficial not only in preventing type 2 diabetes, but also in treatment of the disease. In recent years, the incidence of cardiovascular diseases in China has been on the rise. Consumption of meat has been linked to poor cardiovascular health. There is evidence that consumption of red meat, and particularly processed red meat, increases the risk of stroke (Yang et al., 2016). Conversely, vegetarian diets are reportedly associated with beneficial effects on cardiovascular health (Campbell, 2017; Key, Appleby, & Rosell, 2006). In particular, the diet is associated with lower blood lipids (including cholesterol) (Wang et al., 2015; L. Zhang et al., 2010; Z. Zhang, Ma, Chen, & et.al., 2013), lower blood pressure (Yokoyama, Nishimura, Barnard, & et.al., 2014), and lower mortality from ischemic heart disease and stroke (Campbell, 2017). These results are not only found in the West, but also with the Chinese in a study examining the prevalence of cardiovascular disease risk factors and their associations with dietary habits and physical activity in a suburban area of Beijing. It found that vegetarians had less risk of overweight/obesity, diabetes, hypertension, dyslipidemia, and MS (L. Zhang et al., 2010)

Characteristics of Chinese vegetarianism

Vegetarianism is not easy to define exactly in any society, and more difficult in China. In the West, there are different types of vegetarians, for instance, lacto ovo vegetarian (eggs and dairy products, but no meat), lacto vegetarian (dairy products, but no eggs or meat), ovo vegetarian (eggs, but no dairy products or meat), pescatarian (fish, eggs, and dairy products, but no non-fish meat), and vegan (no animal products of any kind, including eggs, dairy products, and honey). In contrast, there are many types of vegetarians in China, different from those in the West, although all are called *su* (vegetarian). For instance, within Chinese Buddhism, many types of vegetarians and vegetarian dieting habits exist, with no strict rule on monastics being vegetarians, and no requirement for Buddhist followers to become pure vegetarians. Generally speaking, Buddhist monks and nuns in China are expected to maintain a vegetarian diet, and abstain from all forms of meat, fish, and eggs, and also garlic, onions, and leeks (five kinds of pungent plant roots). There is more flexibility for the Buddhist laity in China. They are not required to be lifelong vegetarians and some choose a semi-vegetarian diet, or eat vegetarian food for a specified period of time. They may be different kinds of vegetarians, including:

1. Some do not eat animal products at all;
2. Some do not eat meat but eat eggs and milk and other milk products;
3. Some do not eat meat and do not eat garlic, onions and leeks;

4. Some do not eat meat but would eat vegetables cooked with meat, especially in social settings;
5. Selective vegetarians - some only observe vegetarianism at certain times only, e.g., some only eat vegetarian porridge for breakfast but would eat animal products at other times; some would observe a vegetarian diet for six days a month, i.e., on the eighth, fourteenth, fifteenth, twenty-third, and the last two days of each lunar month.

Similarly, there are various types of vegetarians in Daoism. Many Quanzhen monasteries are closer to vegan, excluding eggs and dairy products. However, as pointed out (Komjathy, 2011), Quanzhen monastics consume meat and eggs outside of the monastery walls, especially when eating with relatives, guests, and officials. For many of such individuals, vegetarianism is a monastic obligation rather than a personal affinity or commitment. For Zhengyi sect, they follow a vegetarian diet during fasting period and other important periods, but not generally (Komjathy, 2011).

Another more diverse group, the newly converted vegetarians in China, have switched to a vegetarian diet either out of concern for animal welfare as animal activists and animal lovers, for health concerns, or for other reasons. They may be semi-vegetarians, vegetarians of various kinds, vegans and others.

In view of the cultural and religious backgrounds and the mixed composition of the vegetarian population in China, one characteristic is their broad and flexible approach to vegetarianism, a broad church, so to speak. After all, Chinese food in general is characterized by its notable flexibility (K. C. Chang, 1977). To illustrate, despite the religious advocacy for abstention from meat, there is considerable flexibility in Buddhist and Daoist vegetarianism. A story was told by a Taiwan Buddhist Master that even though he is a religious and community leader who has been observing a vegetarian diet for over eighty plus years, he still could not avoid eating some foods that contained non-vegetarian ingredients. Once he was invited by a high school principal in Taiwan to stay at his home as a house guest, and the host cooked boiled dumplings that was made of leeks and eggs. The Buddhist master said nothing so as to avoid any sense of discourtesy and ate the entire plate of dumplings. On another occasion, a group of Taiwan Buddhists went on a tour to Japan. The Japanese Buddhist Association served them noodles containing fish and shrimp. In order to avoid humiliating the hosts, the Taiwan Buddhists did not say anything and ate the noodles. The Master explained this by saying that “in receiving and practicing the Buddhist precepts, one should do so in a complete and thorough manner, yet one cannot become shackled by its tenets and lose the spirit of the Dharma” (Venerable Master Hsing, 2015, p. 9). As has been argued, Chinese vegetarian “flexitarianism” is central to both the pedagogical practice of activists and the understanding of vegetarianism among non-activists, and this “flexibility built on long-standing cultural attempts to negotiate a balance between the moral unease surrounding meat-eating and the moral reprehension of complete

vegetarianism for all but the clergy” (Klein, 2017, p. 272). Furthermore, it was found that in China, “strict vegetarianism threatened to undermine familial and social ties, but periodic observances of meat-free diets, particularly in the context of religious commitments, was a culturally understood practice, if not always easy to negotiate” (Klein, 2017, p. 272).

Relevantly, in Chinese culture in general, it is paramount in social settings to avoid showing disrespect or offending others especially the hosts and in particular for dining occasions. One would always try to express delight and enjoyment of the food offered by the hosts, even when one feels otherwise. This extends to dining with strangers as well as with one’s relatives or family members (especially parents and senior family members). The centrality of food and focus on eating and sharing of food in China is regarded as basic and essential, and it is manifested in family life, business dealings and ordinary socialization. As the survey indicated, the most obvious obstacle to becoming a pure vegetarian in China is that such a lifestyle can cause difficulties and inconveniences in terms of family and social life as well as business and workplace relations (see also Klein, 2017, p. 270 for similar accounts of inconvenience or being impractical in one’s meat avoidance in China). As said, sometimes vegetarianism may be viewed as “anti-social” in Chinese culture where it is customary show “face” to one’s dinner guests with tableful of delicacies (Sun, 2018), which means meat dishes. Although some respondents of the survey believe that there is a lack of enough vegetarian restaurants in China, the increase and availability of vegetarian restaurants cannot overcome this obstacle. It is the family and the social and public life where communal eating and sharing of food is so integral and important that it makes converting to a pure vegetarian in China particularly challenging. In consideration of this, for the purpose of reducing meat consumption in China, it would be more strategic and effective to encourage the general Chinese population to consume more vegetarian food and reduce meat in their diet rather than focusing on conversion to pure vegetarianism. After all, pure vegetarian population is always a small minority group in most societies. Given the size of the Chinese population and total amount of consumption of meat, any slight reduction by the individuals as a whole would make an enormous difference. Besides, because of the dominant non-meat components of the normal Chinese meals and the large variety of non-meat food available to the Chinese, and the fact that the Chinese people, a predominately farming population, have largely adopted a plant-based diet since ancient times (Sun, 2018), advising people to eat less meat instead of quitting meat altogether would find a more receptive audience. A related fact is that as popularity of vegetarian restaurants scattered across China’s cities is flourishing, only around 10% of their customers are vegetarians (Yeung, 2013). Some of the vegetarian restaurants are struggling to make a profit, and “many of these restaurants fail because they target only vegetarians or vegans, but that group is too small in China” (Leng, 2018).

Another characteristic of the Chinese vegetarian culture is that over the centuries, Chinese vegetarian cooking has developed into a sophisticated cuisine in its own right. An extensive variety of plant-based protein-rich foods is used to imitate the flavours and textures of meat.

Chinese vegetarian cuisine has many fake meat dishes complete with meat dish names - bean curd skin becoming mock poultry, wheat gluten standing in for meat, smoked sausage moulded out of beans and flour, chicken replaced with compressed *doufu*, deep-fried mushrooms and bamboo shoots presented as crispy pork strips and fish, and sweet and sour pork made from soybean layers, and many others (see He, 2013). It is true that for many of these dishes, the emphasis is on recreating the taste of meat. One interpretation of this Chinese vegetarian culinary feature is that it is the result of the Chinese vegetarians' craving for meat. However, a Chinese interpretation is that they are created not just for vegetarians, but also for the purpose of encouraging non-vegetarians to eat vegetarian food and enticing them to learn about vegetarianism. This is particularly true in Chinese culture which stresses that lavish meat offerings be made for certain ceremonial rites (Venerable Master Hsing, 2015, p. 17). Instead of disapproving such approach to vegetarianism by non-Chinese vegetarian critics, it is suggested that the Chinese culinary inventiveness and delight in mock meat dishes and Chinese vegetarian food in general should be celebrated and promoted to other countries for the enjoyable benefit of world culinary culture, and of mankind.

A singular and related issue attributable to reducing meat consumption in China is food safety. In recent years, food safety concerns have not only led to a rapid decline of social trust in China (Y. Yan, 2012), but more pragmatically they have made many Chinese fearful of animal products as food scandals are being exposed in the media not infrequently, for instance, live pigs injected with the asthma drug clenbuterol, live pigs and cattle injected with water, meat from diseased pigs and other animals sold in the market, melamine-tainted milk powder, fish and prawns fed with birth control pills, duck eggs tainted with cancerogenic dye. Additionally, the intensified animal factory production systems introduced from the West to China in recent times have contributed to the Chinese concerns about meat in terms of the taste and growth hormones, antibiotics and other chemicals in the meat causing unnatural sexual development in adolescents in China (Klein, 2017, p. 262). A study in 2016 from China found that traces of up to 21 antibiotics in the veterinary form were found in 80% of the urine samples of 586 children aged between eight and eleven, linked to the meat they consumed as China's livestock and poultry industries are notorious for using high volumes of antibiotics (A. Yan, 2016). In a Pew Global Attitudes Survey, 71% of Chinese respondents thought food safety was a big problem; as China's middle classes gravitate towards healthier and safer food, plant-based diets are seen as viable, secure alternatives to meat, and carry the added benefit of reducing greenhouse gas emissions from raising farm animals. (Zhou, 2017). These problems have helped and will continue to help Chinese consume more vegetarian food in place of meat.

Finally, people in different countries and regions eat differently. Naturally, vegetarians in different countries also eat differently. For the purpose of reducing meat consumption in China and in view of China's cultural and social conditions and the special features of Chinese vegetarianism, a strategic approach would be to focus on promoting and increasing the consumption of vegetarian food among the general Chinese population highlighting the

scientific and medical evidence of the health benefits of vegetarian food and the health harms of meat consumption. After all, vegetarian food has always been an integral and prominent part of the Chinese diet, enjoyed by all Chinese for thousands of years.

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